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# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
Office Action Ownerson	10/598,627	PUPUTTI, MATTI	
Office Action Summary	Examiner	Art Unit	
	RONG LE	2423	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	-
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  36(a). In no event, however, may a reply be time  will apply and will expire SIX (6) MONTHS from  cause the application to become ABANDONEI	l. ely filed the mailing date of this communica 0 (35 U.S.C. § 133).	
Status			
<ul> <li>1) ☐ Responsive to communication(s) filed on <u>02 December</u></li> <li>2a) ☐ This action is <b>FINAL</b>. 2b) ☐ This</li> <li>3) ☐ Since this application is in condition for allowant closed in accordance with the practice under Expression in the practice of the practi</li></ul>	action is non-final. nce except for formal matters, pro		sis
Disposition of Claims			
4) ☐ Claim(s) 1-3,16-33 and 36-46 is/are pending in 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-3, 16-33, 36-46 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.		
Application Papers			
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examiner	epted or b) $\square$ objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	37 CFR 1.85(a). ected to. See 37 CFR 1.12	, ,
Priority under 35 U.S.C. § 119			
<ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the prior application from the International Bureau</li> <li>* See the attached detailed Office action for a list of</li> </ul>	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No d in this National Stage	
Attachment(s)  1)	4) 🔲 Interview Summary	(PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	te	

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#### **DETAILED ACTION**

1. In view of the Appeal Brief filed on 12 02, 2010,
PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

/Andrew Y Koenig/ Supervisory Patent Examiner, Art Unit 2423 Application/Control Number: 10/598,627 Page 3

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#### Miscellaneous

Claims pending: 1-13, 16-33, 36-46

Claims withdrawn: 1-13, 32-33

Claims amended: 16, 24, 26, 27, and 31

Claims cancelled: 14-15, 34-35

New claims: 36-46

### Response to Arguments

Applicant's arguments, with respect to the rejection(s) of claim(s) 16-18 and 20-21, 23-26, 27-31 have been fully considered and are persuasive. However, upon further consideration, a new ground(s) of rejection is made in view of Suzuki in view of Argues.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 27 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by (EP0975109 A1) to (Suzuki).

**Regarding claims 27 and 31,** Suzuki discloses a digital broadcast receiver apparatus consisting of a front end unit, for receiving the transport stream, a transport decoding unit for extracting the transmission schedule information (control message,

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and transmission time information). The transmission schedule information which is sent earlier in time than the utilization data itself, includes multiple pieces of information including, the receiver identifier, and the transmission time the utilization data is to be transmitted. Suzuki further discloses a CPU 64, having control means which controls the power supply to the Front end 61, the transport decoder 62 and the AVD 63 according to the preinform table (configured to receive the transmission time information, comprising selectively turning on a receiver to receive the messages at a time that substantially coincides with the future transmission time). (Fig 1-4, 6, par. 10-12, 43-45, 50)

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Suzuki teaches multiplexing the transport stream wherein the transport stream consists of services to be transmitted, wherein the services include transmission schedule information for future EMM (future conditional access message transmission time, conditional access messages to be transmitted in the future). Suzuki also teaches that the transmission schedule information may be transmitted as part of the Si or PSI information according to DVB & Mpeg standards.

Suzuki teaches as the receiver turn ON at the designated time to receive either EMM or other download data, as mentioned earlier, since the schedule information is multiplexed into the audio and video transport stream more future EMM messages will be received, which reads in (causing transmission time information to be requested)

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 16-20, 24-26, 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US pat: 6452644 B1) to (Shimakawa), in view of (EP0975109 A1) to (Suzuki), in further view of (US pub: 20080077966 A1) to (Arques).

Regarding claim 16, Shimakawa teaches EPG information contains the next transmission clock time, which reads on (message) and television receivers, receiving the EPG information, which reads on (receiving a plurality of messages relating to broadcast content). (col. 6, II. 3-6, 15-17) Shimakawa further teaches the inclusion of clock time at which the next transmission will take place within the transmission of EPG (or other types of data), which reads on (each of said messages being associated with time information relating to a transmission time for messages which are to be transmitted to a receiver in the future). (col. 6, II. 15-17) Shimakawa further teaches activating the relevant circuitry within the receiver to turn on when the scheduled information will transmit and remain in standby mode the rest of the time much like within a mobile data receiver, which reads on (selectively activating the receiver to receive the future control messages at the transmission time). (col.6, II. 17-27)

Shimakawa fails to teach "control messages relating to broadcast content, control messages relating information for determining whether a user has necessary

subscriptions in place to view the broadcast content or information required to decrypt the broadcast content"

Suzuki teaches sending a transport stream of services to be transmitted, wherein the services include transmission schedule information for future EMM (control messages information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content) or other types of download data (control messages relating to broadcast content). Suzuki also teaches that the transmission schedule information may be transmitted as part of the Si or PSI information according to DVB & Mpeg standards (Fig 2, 3, 4, Par. 10, 12, 43-45)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shimakawa by having control messages relating to broadcast content, control messages relating to information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content as taught by Suzuki in order to effectively prevent unauthorized viewers from viewing certain content.

Shimakawa in view of Suzuki fails to specifically teach "control messages comprising information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content"

Arques teaches a system using the PSI/SI signal tables comprises of a CAT table wherein the ECM information is included in the messages (control messages

comprising information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content) for controlling user access and decryption rights to the digital television system (par. 5, 14-15,)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shimakawa in view of Suzuki by having control messages comprising information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content as taught by Arques in order to efficiently and quickly access program specific information.

**Regarding claims 17 and 38,** Shimakawa in view of Suzuki in view of Arques teaches said control messages.

Shimakawa further teaches "extracting said transmission time information from said control messages"

Shimakawa teaches the clock time at which the EPG will be transmitted again (parameter NXT) being copied from the memory 58 into a memory of a processor 55. (col. 7, II. 34-39, Fig 5)

**Regarding claims 18 and 39,** Shimakawa in view of Suzuki in view of Arques teaches selectively activating the receiver.

Suzuki further teaches "setting a power-up time for the receiver based on said transmission time information"

Suzuki teaches the CPU controller 64 which used the time extractor 64C to recognize all the information with reference to time 13 (step S2) and stores it in memory 65. The controller then checks the CPU 64 clock for the transmission time and controls the power supply to FE61 and TD 62 accordingly. (par. 59-60, FIG 6)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shimakawa in view of Suzuki in view of Arques by setting a power-up time for the receiver based on said transmission time information as taught by Suzuki in order to minimized standby power of a receiver device.

Regarding claims 19 and 40, Shimakawa in view of Suzuki in view of Arques teaches setting a power-up time.

Suzuki further teaches "setting up a power up time to take account of delays in powering up the receiver."

Suzuki teaches the CPU64 confirms the present time is several seconds before the transmission time, and turns the power supply on to the FE 61, and TD 62, awaiting the data directly to the self IRD 60. (par. 60-61, FIG 7)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shimakawa in view of Suzuki in view of Arques by setting up a power up time to take account of delays in powering up the receiver as taught by Suzuki in order to minimized standby power of a receiver device.

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**Regarding claims 20 and 41,** Shimakawa in view of Suzuki in view of Arques teaches selectively activating the receiver.

Suzuki further teaches "monitoring the power-up time and turning on the receiver when the power-up time is reached."

Suzuki teaches the controller then checks the CPU 64 clock for the transmission time and controls the power supply to FE61 and TD 62 accordingly. When CPU 64 confirms the present time is several seconds before the transmission time, and turns the power supply on to the FE 61, and TD 62, awaiting the data directly to the self IRD. In paragraph 61, lines 1-5, FIG 7, label S5, Suzuki inherently monitors the power-up time in that the CPU must monitor the expiration of the predetermined delay in order to receive the future transmission. (par. 59-61, FIG 7)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shimakawa in view of Suzuki in view of Arques by setting up a power up time to take account of delays in powering up the receiver as taught by Suzuki in order to minimized standby power of a receiver device.

Regarding claim 24, Shimakawa teaches EPG information contains the next transmission clock time, which reads on (control message) and television receivers, receiving the EPG information, which reads on (receiving a plurality of control messages relating to broadcast content). (col. 6, II. 3-6, 15-17) Shimakawa further teaches the inclusion of clock time at which the next transmission will take place within the

transmission of EPG (or other types of data), which reads on (each of said control messages being associated with time information relating to a transmission time for control messages which are to be transmitted to a receiver in the future). (col. 6, II. 15-17) Shimakawa further teaches activating the relevant circuitry within the receiver to turn on when the scheduled information will transmit and remain in standby mode the rest of the time much like within a mobile data receiver, which reads on (selectively activating the receiver to receive the future control messages at the transmission time). (col.6, II. 17-27)

Shimakawa fails to teach "control messages relating to broadcast content, control messages relating information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content"

Suzuki teaches sending a transport stream of services to be transmitted, wherein the services include transmission schedule information for future EMM (control messages information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content) or other types of download data (control messages relating to broadcast content). Suzuki also teaches that the transmission schedule information may be transmitted as part of the Si or PSI information according to DVB & Mpeg standards (Fig 2, 3, 4, Par. 10, 12, 43-45)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shimakawa by having control messages relating

to broadcast content, control messages relating to information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content as taught by Suzuki in order to effectively prevent unauthorized viewers from viewing certain content.

Shimakawa in view of Suzuki fails to specifically teach "control messages comprising information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content"

Arques teaches a system using the PSI/SI signal tables comprises of a CAT table wherein the ECM information is included in the messages (control messages comprising information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content) for controlling user access and decryption rights to the digital television system (par. 5, 14-15,)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shimakawa in view of Suzuki by having control messages comprising information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content as taught by Arques in order to efficiently and quickly access program specific information.

**Regarding claim 25,** Shimakawa in view of Suzuki in view of Arques teaches the control messages.

Shimakawa further teaches "incorporating said time information".

Shimakawa teaches EPG information contains the next transmission clock time, and television receivers, receiving the EPG information. (col. 6, II. 3-6, 15-17)

Regarding claim 26, Shimakawa teaches EPG information contains the next transmission clock time, which reads on (control message) and the broadcaster indicating and including various types of data within the EPGs, which reads on (preparing a plurality of control messages) (col. 6, II. 15-17, 28-30, 38-55)

Shimakawa teaches the inclusion of clock time at which the next transmission will take place within the transmission of EPG (or other types of data), which reads on (each of the messages including information relating to a predetermined transmission time for future control messages) (col.6, II. 15-19)

Shimakawa teaches the broadcaster indicating and including various types of data within the EPGs, and the a television receiver arranged to received the EPG data from the broadcaster, which reads on (directing transmission of the control messages to a receiver for receiving the control messages).(col. 6, II. 15-17, 28-30, 38-55, 56-58)

Shimakawa teaches television receivers, receiving the transmission of EPG information(or other types of data) (col.6, II. 3-6), which contain the next transmission time, and activating the relevant circuitry within the receiver(col.6, II. 15-17) by the microprocessor 55, (col.6, II. 62-63), which reads on (a selective activation module),

when an EPG transmission is due to be received, to turn ON much like within a mobile data receiver, which reads on (the control messages being transmitted to the receiver for a selective activation module to selectively activate the receiver to receive the future control message at the predetermined time). (col.7, II. 53-56)

Shimakawa fails to teach "preparing control messages relating to broadcast content, control messages relating information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content"

Suzuki teaches multiplexing the transport stream wherein the transport stream consists of services to be transmitted, wherein the services include transmission schedule information for future EMM (preparing control messages information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content) or other types of download data (control messages relating to broadcast content). Suzuki also teaches that the transmission schedule information may be transmitted as part of the Si or PSI information according to DVB & Mpeg standards (Fig 2, 3, 4, Par. 10, 12, 43-45)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shimakawa by having control messages relating to broadcast content, control messages relating to information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content as taught by Suzuki in order to effectively prevent unauthorized viewers from viewing certain content.

Shimakawa in view of Suzuki fails to specifically teach "control messages comprising information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content"

Arques teaches a system using the PSI/SI signal tables comprises of a CAT table wherein the ECM information is included in the messages (control messages comprising information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content) for controlling user access and decryption rights to the digital television system (par. 5, 14-15,)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shimakawa in view of Suzuki by having control messages comprising information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content as taught by Arques in order to efficiently and quickly access program specific information.

Claims 28, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over (EP0975109 A1) to (Suzuki), in further view of (US pub: 20080077966 A1) to (Arques).

Regarding claims 28 and 44, Suzuki teaches the conditional access messages.

Suzuki fails to specifically teach "conditional access messages comprise entitlement management messages"

Arques teaches a system using the PSI/SI signal tables comprises of a CAT table wherein the ECM information is included in the messages (conditional access messages comprise entitlement management messages) for controlling user access and decryption rights to the digital television system (par. 5, 14-15,)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Suzuki by having conditional access messages comprise entitlement management messages as taught by Arques in order to efficiently and quickly access program specific information.

Claims 36-37, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US pat: 6452644 B1) to (Shimakawa), in view of (EP0975109 A1) to (Suzuki), in view of (US pub: 20080077966 A1) to (Arques), in further view of (WO0306560 A2) to (Bons).

Regarding claims 36, 37, and 43, Shimakawa in view of Suzuki in view of Arques teaches "each of said control a message is further associated with information defining transmission parameters for the control messages to be transmitted in the future".

Shimakawa in view of Suzuki in view of Arques fails to specifically teach "transmission parameters including information on the bearer, the network or the operator providing the control messages"

Bons teaches transmitting EMM messages, including a first field that would have (EMM\_XID), which reads on (transmission parameters) for that enable the terminal to identify the logical channel described, which reads on (information on the bearer, the network or the operator providing the control messages). (col. 2, II. 60-67)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shimakawa in view of Suzuki in view of Arques by having transmission parameters including information on the bearer, the network or the operator providing the control messages as taught by Bons in order to effectively prevent unauthorized viewers from viewing certain content.

Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US pat: 6452644 B1) to (Shimakawa), in view of (EP0975109 A1) to (Suzuki), in view of (US pub: 20080077966 A1) to (Arques), in further view of (US pat: 7698568 B2) to (Alve).

**Regarding claim 21,** Shimakawa in view of Suzuki in view of Arques teaches an apparatus.

Shimakawa in view of Suzuki in view of Arques fails to teach "mobile apparatus".

Alve teaches a DRM system distributing encrypted service key over a mobile telephone network to a mobile terminal, which reads on (a mobile apparatus) using it to decrypt content. (Fig 2, col. 2, II. 11-26, col. 4, II. 8-16)

Therefore it would have been obvious to one of ordinarily skilled in the art at the time of the invention to modify Shimakawa in view of Suzuki in view of Arques by

including a mobile receiver as taught by Alve in order to allow the STB to have an extra network connection to receive ECMs for backup purposes.

**Regarding claim 22,** Shimakawa in view of Suzuki in view of Arques in view of Alve teaches an apparatus.

Alve further teaches "mobile apparatus configured in accordance with DVB-H specification".

Alve teaches a DRM system distributing encrypted service key over a mobile telephone network to a mobile terminal, which reads on (a mobile apparatus) using it to decrypt content transported via DVB, in order to deliver encryption an content information to a mobile terminal DVB-H must be used. (Fig 2, col. 2, II. 11-26, col. 4, II. 8-16)

Therefore it would have been obvious to one of ordinarily skilled in the art at the time of the invention to modify Shimakawa in view of Suzuki in view of Arques in view of Alve, by including mobile apparatus configured in accordance with DVB-H specification as taught by Alve, in order to allow the STB to have an extra network connection to receive ECMs for backup purposes.

Claims 23 and 42 rejected under 35 U.S.C. 103(a) as being unpatentable over (US pat: 6452644 B1) to (Shimakawa), in view of (EP0975109 A1) to (Suzuki), in view of (US pub: 20080077966 A1) to (Arques), in further view of (US pat: 7167895 B1) to (Connelly).

**Regarding claims 23 and 42,** Shimakawa in view of Suzuki in view of Arques teaches the control messages.

Shimakawa in view of Suzuki in view of Arques fails to teach requesting the transmission time information independently.

Connelly teaches client receivers receiving metadata pre-broadcast schedule information and the actual metadata at a later time based on the schedule information given, (col. 5, II. 47-53) registering the client devices with certain specific content providers to receiver certain signals, which reads on (requesting the transmission time information independently). (col. 6, II. 4-10)

Therefore it would have been obvious to one of ordinarily skilled in the art at the time of the invention to modify Shimakawa in view of Suzuki in view of Arques by requesting the transmission time information independently as taught by Connelly, in order to ensure schedule information is always received properly ahead of time.

Claims 29-30, 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US pat: 6452644 B1) to (Shimakawa), in view of (EP0975109 A1) to (Suzuki), in view of (US pub: 20080077966 A1) to (Arques), in further view of (US Pat Pub: 20020021809 A1) to (Salo).

**Regarding claims 29 and 45,** Shimakawa in view of Suzuki in view of Arques teaches the transmission time information.

Shimakawa in view of Suzuki in view of Arques fails to teach received in a messaging service format.

Salo teaches a cellular transceiver receiving the service announcements, (par. 30) the service announcement may be in the form of a special short message service (SMS) message which contains the timing and location information needed by the receiver. (par. 31)

Therefore it would have been obvious to one of ordinarily skilled in the art at the time of the invention to modify Shimakawa in view of Suzuki in view of Arques, to receive in a messaging service format as taught by Salo, in order to backup formats of sending the same information to the receiver.

**Regarding claims 30 and 46,** Shimakawa in view of Suzuki in view of Arques in view of Salo teaches an apparatus.

Salo further teaches the messaging service format comprises SMS or MMS.

Salo teaches a cellular transceiver receiving the service announcements, (par. 30) the service announcement may be in the form of a special short message service (SMS) message which contains the timing and location information needed by the receiver. (par. 31)

Therefore it would have been obvious to one of ordinarily skilled in the art at the time of the invention to modify Shimakawa in view of Suzuki in view of Arques in view of Salo, to receive in a messaging service format as taught by Salo, in order to backup formats of sending the same information to the receiver.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RONG LE whose telephone number is (571)270-7637. The examiner can normally be reached on M-F (8:30 - 6pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Y. Koenig can be reached on 571-272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RONG LE Examiner Art Unit 2423

/Andrew Y Koenig/ Supervisory Patent Examiner, Art Unit 2423